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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,705	10/01/2003	Kelly M. Butler	D.1613	4599

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John E. Toupal
116 Concord Street
Framingham, MA 01702

EXAMINER

QIN, JIANCHUN

ART UNIT	PAPER NUMBER
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2837

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/674,705

Applicant(s)

BUTLER, KELLY M.

Examiner

Jianchun Qin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/01/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (U.S. Pub. No. 20020104428) in view of Cipriani (U.S. Pat. No. 4951543).

With respect to claim 1:

Wilson discloses a stringed instrument (Fig. 1) comprising: a solid body (12) having exposed front and rear surfaces (Fig. 1); a tuning mechanism (16); a neck (14) having one end joined to said body and an opposite end retaining said tuning mechanism (Fig. 1); a retainer block encompassed by said rear surface (Fig. 3, the portion surrounding the opening in which the enlarged end of the string is engaged); a plurality of strings (24) each having a first end secured to said tuning mechanism (Fig. 1); and a second end retained by said retainer block (Fig. 3).

Wilson does not mention: said retainer block is distinct from said rear surface.

Cipriani teaches a stringed instrument (Fig. 1) comprising: a plurality of strings (4, 4', 4'') each having a first end secured to a tuning mechanism (1) and a second end retained by a retainer block (Fig. 4B, the plate embedded in the undersurface of the

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brace 20, upon which the enlarged end of the string is anchored) which is distinct from the body of the instrument (Fig. 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the retainer block of Cipriani into the invention of Wilson in order to provide a more effective reinforcing structure for attaching the stings to the body of the instrument (Cipriani, col. 5, lines 15-23).

With respect to claim 2:

Wilson discloses: a bridge mounted on said front surface and wherein said strings extend from said tuning mechanism, over said bridge, and through said body to said block (Figs. 1 and 3).

With respect to claims 3 and 4:

Wilson discloses the string instrument including the subject matter discussed above except: said retainer block has an inner surface and an outer surface and defines a plurality of channels extending between said inner and outer surface, and each of said strings having enlarged ends passes through a different one of said channels.

Cipriani teaches a stringed instrument (Fig. 1) comprising: wherein said retainer block has an inner surface (the side touching the brace 20) and an outer surface (the side upon which the string is anchored) and defines a plurality of channels extending between said inner and outer surface, and each of said strings passes through a different one of said channels (Fig. 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the retainer block of Cipriani in the invention of

Wilson in order to provide a more effective reinforcing structure for attaching the stings to the body of the instrument (Cipriani, col. 5, lines 15-23).

With respect to claims 11 and 12:

The teaching of Wilson includes: said body (Fig. 1, element 12) defines a cavity (Fig. 3, the opening in which the enlarged end of the string is anchored) intersecting said rear surface (Figs. 1 and 3).

Wilson does not mention expressly: said cavity retaining said block; and said second ends are enlarged to prevent passage through said channels.

Cipriani teaches a stringed instrument (Fig. 1) comprising: a plurality of strings (4, 4', 4'') each having a first end secured to a tuning mechanism (1) and a second end retained by a retainer block (Fig. 4B, the plate embedded in the undersurface of the brace 20, upon which the enlarged end of the string is anchored); wherein said retainer block is unitary and embedded in a base member (Fig. 4B) and defines a plurality of channels, and each of said strings passes through a different one of said channels (Fig. 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the retainer block of Cipriani in the invention of Wilson in order to provide a more effective reinforcing structure for attaching the stings to the body of the instrument (Cipriani, col. 5, lines 15-23).

With respect to claims 5 and 13:

Wilson teaches a plurality of channels (25) through which the strings pass and are fastened (Figs. 3 and 4; section 0023); wherein each of said channels comprises a

counterbore (Fig. 3, the opening in which the enlarged end of the string is anchored) in the rear surface retaining one of said enlarged second ends.

3. Claims 6-10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Cipriani, as applied to claims 1-3 and 11 above, and further in view of Kendall (U.S. Pat. No. 5260505).

With respect to claims 6 and 14:

Wilson in view of Cipriani teach the string instrument including the subject matter discussed above. Cipriani further teaches that said block is unitary (Fig. 4B, the plate embedded in the undersurface of the brace 20, upon which the enlarged end of the string is anchored).

Wilson in view of Cipriani do not mention expressly: said block is made of brass.

Kendall discloses a string retained for a stringed instrument wherein said string retainer is made of brass (col. 7, lines 19-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Kendall in the combination of Wilson and Cipriani in order to make the string retainer block more durable (Kendall, col. 7, lines 23-24).

With respect to claim 7:

The teaching of Wilson includes: a bridge mounted on said front surface and wherein said strings extend from said tuning mechanism, over said bridge, and through said body to said block (Figs. 1 and 3).

With respect to claims 8, 9, 15 and 16:

Wilson does not mention expressly: said retainer block has an inner surface and an outer surface and defines a plurality of channels extending between said inner and outer surface, and each of said strings having enlarged ends passes through a different one of said channels.

Cipriani teaches a stringed instrument (Fig. 1) comprising: a plurality of strings (4, 4', 4'') each having a first end secured to a tuning mechanism (1) and a second end retained by a retainer block (Fig. 4B, the plate embedded in the undersurface of the brace 20, upon which the enlarged end of the string is anchored); wherein said retainer block has an inner surface (the side touching the brace 20) and an outer surface (the side upon which the string is anchored) and defines a plurality of channels extending between said inner and outer surface, and each of said strings passes through a different one of said channels (Fig. 4B).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the retainer block of Cipriani in the invention of Wilson in order to provide a more effective reinforcing structure for attaching the stings to the body of the instrument (Cipriani, col. 5, lines 15-23).

With respect to claim 10:

Wilson teaches a plurality of channels (25) through which the strings pass and are fastened (Figs. 3 and 4; section 0023); wherein each of said channels comprises a counterbore (Fig. 3, the opening in which the enlarged end of the string is anchored) in the rear surface retaining one of said enlarged second ends.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Response to Arguments

5. Applicant's arguments received 12/07/06 with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Amended claims 1-16 are rejected as new grounds have been found from the cited prior art references to teach the claimed invention recited in these claims. Detailed response is given in sections 2-3 as set forth above in this Office Action.

Applicant argued that "Wilson fails to anticipate the instrument now recited in claim 1" because "the strings are not secured to a block distinct from the body".

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Applicant's further argued that "incorporating the internally disposed brace 20 of Cipriani's acoustic guitar onto the rear surface of Wilson's electric guitar would not have been obvious to one having ordinary skill in the art in that any reason for such a modification is not suggested by the teachings of either patent". These arguments are not persuasive. The examiner considers that Wilson's disclosure is not clear about securing the strings to a block distinct from the body of the instrument. Cipriani teaches a retainer block embedded in the undersurface of the brace 20 upon which the enlarged end of the string is anchored (Fig. 4B), and said block is distinct from the brace 20 or the body of the instrument. The combination of Wilson with Cipriani's teaching of the retainer block (not the brace 20) reads on the claims. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the retainer block of Cipriani in the invention of Wilson in order to provide a more effective reinforcing structure for attaching the strings to the body of the instrument. The combination of the references is, therefore, proper. The rejections stand.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianchun Qin
Examiner
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JQJ 10

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LINCOLN BORDYAN
SUPERVISORY PATENT EXAMINER